<u>CITY OF HIGH POINT POLICY REGARDING TRAFFIC IMPACT ANALYSIS</u>

MAY 20, 1999 **AMENDED NOVEMBER 7, 2007**

Purpose:

A Traffic Impact Analysis (TIA) assesses the impact of a proposed development, zoning change, or special use approval on the transportation system. Its purposes are (1) to ensure that proposed developments or zoning changes do not adversely affect the transportation network, (2) to identify any traffic problems associated with access from the site to the existing transportation network, (3) to delineate solutions to potential problems, and (4) to present improvements to be incorporated into the proposed development.

When Required:

When required, the TIA should be submitted for review to the High Point Department of Transportation and must be approved by the Director of Transportation prior to any other development or zoning approval(s). A TIA shall not be utilized as a means for staff to require the party developing the property to make needed transportation improvements remote from the property for which the TIA is submitted, nor shall identified deficiencies in Level of Service (LOS) in and of themselves preclude approval of the proposed development. The TIA shall be required but is not limited to the following situations and shall be submitted at the time of application for each of the following:

- 1. Development Petitions: properties of which rezoning and/or special use permits are requested, where the potential development may generate 150 or more trips during the adjacent roadway's peak hour(s) or the development's peak hour(s).
- 2. Subdivision/Site plan/Platting/approval: when the potential development may generate 150 or more trips during an adjacent roadway's peak hour(s) or the development's peak hour(s).
- 3. Technical Review Committee (TRC): when TRC applications reflect development proposals that may generate 150 or more trips during an adjacent roadway's peak hour(s) or the development's peak hour(s).
- 4. Localized Safety or Capacity Conditions: the Director of Transportation shall require that a TIA be submitted for any or all of the above situations, regardless of the potential trip generation levels, when there are localized safety or capacity deficiencies such as:
 - current traffic problems in the area of the proposed development, such as high accident locations, confusing intersections, or an intersection in need of a traffic signal;

- current or projected level of service of the roadway adjacent to the development, which will be significantly affected;
- the ability of the adjacent, existing or proposed roadway system to handle increased traffic, or the feasibility of improving the roadway system to handle increased traffic:
- other specific problems or deficiencies that may be affected by the proposed development or affect the ability of the development to be satisfactorily accommodated (i.e., capacity deficiency, vertical/horizontal curves, circulation).

Based on information provided in the pre-application conference the Department of Transportation may determine that a complete TIA is not required for a particular site and specific use. Such determination will be made on a case by case basis. In those cases where a complete TIA is not required, the information and analyses required will be discussed with the Department of Transportation and submitted as instructed or according to the TIA format.

The following guidelines will be used by the Director of Transportation to determine whether a full TIA or certain portions of a TIA will be required. Trip generation may be required to determine if capacity or safety problems exist, however, a full TIA may not be required if:

- 1. No safety or capacity problems exist in the immediate vicinity of the site.
- 2. A prior TIA, prepared for a site located within one block, indicates that buildout of vacant tracts will not create capacity or safety problems on the street.
- 3. The potential development or use produces less than 200 trips in the peak hour.
- 4. There is a reuse of an existing building and the new use produces trips equal to or less than one hundred twenty percent (120%) of the trips generated by the prior use, and if no safety or capacity problems exist.
- 5. No improvements can be implemented beyond what the applicant has agreed to provide.

The applicant may appeal the decision of the Director of Transportation regarding the requirement for, or the composition of, a TIA to the City Manager in writing within ten (10) days of the date of that decision. The City Manager's decision shall be made and communicated to the applicant within ten (10) days of receipt of the written appeal.

Approval:

A TIA, when required, shall be prepared by an individual, group, firm or corporation having demonstrated professional emphasis and experience in transportation planning, engineering, and in the preparation of similar analyses. The TIA document must bear the seal and signature of a licensed professional engineer.

The submitted TIA must be approved by the High Point Department of Transportation. Said approval is valid for a period of time not to exceed eighteen months. Likewise, significant changes in the development proposal or surrounding conditions may require revision to or resubmittal of the TIA.

Required Meeting:

Prior to initiating a required TIA, the applicant is required to schedule and participate in a pre-application conference with the High Point Department of Transportation staff in order to increase understanding of the required elements and format for the TIA.

Format:

A TIA prepared for a specific site proposal should follow the chapter outline as indicated in Table A-1. Wherever additions or modifications are appropriate for a specific site, they should be made.

Table A-1 Traffic Impact Analysis Outline

*A brief narrative for each chapter of the TIA follows.

An Executive Summary must be included in the TIA.

1. **INTRODUCTION**

- ♦ Site and Study Area Boundaries
- ♦ Existing and Proposed Site Uses
- ♦ Existing and Proposed Nearby Uses
- Existing and Proposed Roadways and Intersections

2. **ANALYSIS OF EXISTING CONDITIONS**

- ◆ Daily and Peak Hour(s) Traffic Volumes
- ♦ Capacity Analyses at Critical Points
- ♦ Levels of Service at Critical Points

3. ANALYSIS OF FUTURE CONDITIONS WITHOUT DEVELOPMENT

- ◆ Daily and Peak Hour(s) Traffic Volumes
- ♦ Capacity Analyses at Critical Points
- ♦ Levels of Service at Critical Points

4. TRIP GENERATION

5. **TRIP DISTRIBUTION**

6. TRAFFIC ASSIGNMENT

7. ANALYSIS OF FUTURE CONDITIONS WITH DEVELOPMENT

- ◆ Future Daily and Peak Hour(s) Traffic Volumes
- ♦ Capacity Analyses at Critical Points
- ◆ Levels of Service at Critical Points

8. **RECOMMENDED IMPROVEMENTS**

- ◆ Proposed Recommended Improvements (on & offsite) *Should indicate recommended responsible parties.*
- ♦ Capacity Analyses at Critical Points
- ♦ Levels of Service at Critical Points

9. <u>CONCLUSION</u>

Chapter 1. Introduction

A. Site and Study Area Boundaries

Include a brief description of and a map displaying the size of the land parcel, the general terrain features, and the location within the jurisdiction and region. In addition, identify the roadways that afford access to the site and are included in the study area. The exact limits of the study area should be based on engineering judgment and an understanding of the existing traffic conditions in the site vicinity. In all instances, however, the study area limits will be discussed with the applicant and his traffic engineer and will be determined by the Director of Transportation. The definition of the study area should result, subsequent to the initial staff review of a developer's rezoning application or preliminary site plan, at which time a traffic impact analysis will be required. If the project is being completed in phases, describe the total project and the phases. The study should include an analysis for each phase of the proposed development.

B. Existing and Proposed Site Uses

Identify the existing and proposed uses of the site in terms of the various zoning categories. In addition, identify the number and the type of residential units, and type and amount of commercial, industrial, or office uses in accordance with ITE trip generation categories.

C. Existing and Proposed Nearby Uses

Include a complete description of the existing land uses in the vicinity of the site, as well as their current zoning. Also state the proposed developments of adjacent land using the city's comprehensive land use plan and any other pertinent planning documents. This is

especially important where large tracts of undeveloped land are in the vicinity of the site and are within a prescribed study area.

D. Existing and Proposed Roadways and Intersections

Describe and provide diagrams of the existing roadways and intersections (including road geometrics, lane usage, traffic control, and intersection condition diagrams) within the study area as well as improvements contemplated by the city and state. This includes the nature of the improvement project, its extent, the implementation schedule, and the agency or funding source responsible.

Chapter 2. Analysis of Existing Conditions

A. Daily and Peak Hour(s) Traffic Volumes

Present diagrams depicting daily and peak hour traffic volumes for roadways within the study area. Present turning movement and mainline volumes for the peak hour conditions (a.m., p.m., lunch, and site-generated). Present only mainline volumes to reflect daily traffic volumes. Also present the source and/or the method of computation for all traffic volumes. The City of High Point Transportation Department will make available to the applicant at no cost, existing traffic counts and other information it may possess that is relevant to the particular TIA analysis area.

B. Capacity Analyses at Critical Points

Utilizing techniques as described in the current edition of The Highway Capacity Manual, assess the relative balance between roadway volumes and capacity. Analyze existing conditions (roadway geometrics and traffic signal control) for all peak hours.

C. Level of Service at Critical Points

Based on the results obtained in the previous section, determine and present levels of service (A through F). Include a description of typical operating conditions at each level of service.

Chapter 3. Analysis of Future Conditions Without Development

Describe the anticipated traffic volumes in the future and the ability of the roadway network to accommodate this traffic without the proposed zoning or subdivision request. The future year(s) for which projections are made and associated growth factors will be specified by the Department of Transportation and will depend on the timing of the proposed development.

A. Future Daily and Peak Hour(s) Traffic Volumes

Indicate clearly the method and assumptions used to forecast future traffic volumes so that the city staff can replicate these calculations.

B. Capacity Analyses at Critical Locations

Describe the ability of the existing roadway system to accommodate future traffic (without site development) for all peak hours using the current edition of the Highway Capacity Manual. (If roadway improvements or modifications are committed for implementation by the developer, present the capacity analysis for these conditions.)

C. Levels of Service at Critical Points

Based on the results obtained in the previous section, determine the levels of service (A through F).

Chapter 4. Trip Generation

Present and diagram the amount of traffic generated by the site for daily and three peak hour conditions (a.m., lunch, p.m.) In addition, those trips that result from "passerby trips" must be calculated based on a factor to be provided by the High Point Department of Transportation. Trip generation rates to be used should be those presented in the current edition of, Trip Generation, Institute of Transportation Engineers. Deviation from these rates must be justified and documented to the satisfaction of the Director of Transportation.

Chapter 5. Trip Distribution

Present and diagram the direction of approach for site-generated traffic for the appropriate time periods. The basic method and assumptions used must be clearly stated so that the city staff can replicate these results.

Chapter 6. Traffic Assignment

Describe the utilization of study area roadways by site-generated traffic. Combine the proposed traffic volumes with the anticipated traffic volumes from chapter 3 to describe and diagram mainline and turning movement volumes for future conditions with the site developed as proposed. Clearly state the basic method and assumptions used.

Chapter 7. Analysis of Future Conditions with Development

A. Future Daily and Peak Hour(s) Traffic Volumes

Present and diagram mainline and turning movement volumes for the highway network in the study area, as well as driveways and internal circulation roadways for the 24-hour and peak hour periods.

B. Capacity Analysis at Critical Points

Perform a capacity analysis for all peak hours for future conditions with the site developed as proposed using the current edition of the Highway Capacity Manual.

C. <u>Levels of Service at Critical Points</u>

As a result of the capacity analysis, compute and describe the level of service on the study area roadway system.

Chapter 8. Recommended Improvement

In the event the analysis indicates that unsatisfactory levels of service will occur on study area roadways, describe the improvement proposed to remedy deficiencies. The proposals would identify committed projects by the city and state that were described in chapter 1 and reflected in the analysis contained in chapters 2 and 3.

A. <u>Proposed Recommended Improvements</u>

Clearly describe and diagram the location, nature, and extent of proposed improvements to ensure sufficient safety and roadway capacity. This section should make clear recommendations of installation responsibility for said improvements. Accompanying these recommendations should be a suggested time schedule for implementation of the improvements.

B. Capacity Analysis at Critical Points

Describe the anticipated results of making these improvements.

C. Levels of Service at Critical Points

As a result of the revised capacity analysis presented in the previous section, present the levels of service for the roadway system with improvements.

Chapter 9. Conclusion

The last chapter of the report should be a clear, concise description of the study findings. This concluding chapter should serve as an executive summary.

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